

**Civil Engineering Department
De La Salle University - Manila**

**Experiment No. 6
Data Sheet for Specific Gravity of Cement**

Performed By: Daniel Villanueva, Chloe Felix, Arianna Ongto & Janna Caringal

Date Tested: December 07, 2020

Room Temperature: 27°C

Weather: Light rain showers

Sample Code/ Description: Cement

Test No.	1	2	3
1. Flask No.	1	2	3
2. Weight of Cement Sample, g	64	64	64
3. Initial Volume of Kerosene, ml	0.3	0.7	0.9
4. Temperature at Initial Reading, °C	20	20	20
5. Final Volume of Kerosene, ml	20.7	21.2	21.2
6. Temperature at Final Reading, °C	20	20	20
7. Specific Gravity = $[2] / \{[5] - [3]\}$, g/cc	3.14	3.12	3.15
8. Average Specific Gravity, g/cc	3.14		

Computation / Remarks:

Specific Gravity:

Flask No. 1: $64 / \{20.7 - 0.3\} = 3.14 \text{ g/cc}$

Flask No. 2: $64 / \{21.2 - 0.7\} = 3.12 \text{ g/cc}$

Flask No. 3: $64 / \{21.2 - 0.9\} = 3.15 \text{ g/cc}$

Average Specific Gravity: $(3.14 + 3.12 + 3.15) / 3 = 3.14 \text{ g/cc}$

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**Experiment No. 7
Data Sheet for Unit Weight of Aggregates**

Performed By: Daniel Villanueva, Chloe Felix, Arianna Ongto & Janna Caringal

Date Tested: December 07, 2020

Room Temperature: 27°C

Weather: Light rain showers

Sample Code/ Description: Sand

Test No.	1	2	3
1. Volume of Measure (Container), m ³	0.005	0.005	0.005
2. Weight of Measure, kg	4.85	4.85	4.85
3. Weight of Measure Filled with Sand, kg	12.89	12.93	12.94
4. Weight of Sand = [3] - [2], kg	8.04	8.08	8.09
5. Unit Weight = [4]/[1], kg/ m ³	1608	1616	1618
6. Average Unit Weight	1614		

Computation / Remarks:

Weight of Sand:

Test No. 1: $12.89 - 4.85 = 8.04$ kg

Test No. 2: $12.93 - 4.85 = 8.08$ kg

Test No. 3: $12.94 - 4.85 = 8.09$ kg

Unit Weight:

Test No. 1: $8.04/0.005 = 1608$ kg/ m³

Test No. 2: $8.08/0.005 = 1616$ kg/ m³

Test No. 3: $8.09/0.005 = 1618$ kg/ m³

Average Unit Weight: $(1608 + 1616 + 1618) / 3 = 1614$ kg/ m³

Sample Code/ Description: Gravel

Test No.	1	2	3
1. Volume of Measure (Container), m^3	0.01	0.01	0.01
2. Weight of Measure, kg	7.8	7.8	7.8
3. Weight of Measure Filled with Gravel, kg	24.75	24.91	24.89
4. Weight of Gravel = [3] - [2], kg	16.95	17.11	17.09
5. Unit Weight = [4]/[1], kg/m^3	1695	1711	1709
6. Average Unit Weight	1705		

Computation / Remarks:

Weight of Gravel:

Test No. 1: $24.75 - 7.8 = 16.95 \text{ kg}$

Test No. 2: $24.91 - 7.8 = 17.11 \text{ kg}$

Test No. 3: $24.89 - 7.8 = 17.09 \text{ kg}$

Unit Weight:

Test No. 1: $16.95/0.01 = 1695 \text{ kg}/\text{m}^3$

Test No. 2: $17.11/0.01 = 1711 \text{ kg}/\text{m}^3$

Test No. 3: $17.09/0.01 = 1709 \text{ kg}/\text{m}^3$

Average Unit Weight: $(1695 + 1711 + 1709) / 3 = 1705 \text{ kg}/\text{m}^3$